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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,288	09/19/2001	Joo-Hyong Lee	LGS/S-0030A	9373

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EXAMINER

DIAZ, JOSE R

ART UNIT	PAPER NUMBER
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2815

DATE MAILED: 03/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/955,288

Applicant(s)

LEE, JOO-HYONG

Examiner

José R Diaz

Art Unit

2815

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 20 February 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. **ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).**

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

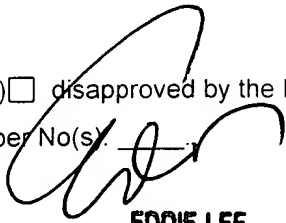
Claim(s) allowed: _____

Claim(s) objected to: _____

Claim(s) rejected: 1-5 and 11-25.

Claim(s) withdrawn from consideration: _____

8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
10. ☐ Other: _____


EDDIE LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Continuation of 5. does NOT place the application in condition for allowance because: the references anticipate the claimed invention. Applicant argues that the references Farrenkopf and Zunino fail to teach an interface between a well and a substrate, and that the reference Wong fails to teach a buried layer/heavily doped region, which is separated from the contact region. However, the Examiner disagrees in view of the following remarks.

With regards to the interface between a well and a substrate, it seems that Applicant has overlooked the inconsistency of the claimed invention. In fact, it seems that Applicant use the term "substrate" interchangeably in the claims referring to either a whole substrate that include the wells or a portion of the substrate that does not include the wells. For instance, in claim 1, lines 3-4 Applicant use the term "substrate" referring to a whole substrate that include the first well. Then, in lines 8-9 of claim 1, Applicant changes the meaning of the term "substrate" to refer to a portion of the substrate that has a common boundary with the first well. Therefore, since Applicant fails to clearly define the term "substrate" in the claims, one of ordinary skill in the art cannot identify where in the device "an interface" is formed. As such, the rejections over Farrenkopf and Zunino are considered to be proper since the location of the interface is undetermined.

With regards to the limitation that the heavily doped region is separated from the contact region, Applicant should note that nowhere in the claims such a limitation is included. For instance, claims 1 and 24 recite the limitation of a heavily doped region formed between a contact region and a well/substrate interface, and claim 15 recites the limitation of a heavily doped region not formed between first/second wells interface. Nowhere in such claims, Applicant specifically states that the heavily doped region is separated from the contact region, as now argued.

With regards to the arguments that the doped region of Wong is not a buried region, Applicant is advised that during patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification" (see MPEP 2111). In view of that, Applicant teaches that the "buried layer" (105, 106) is in fact a doped region, which is formed at a predetermined location beneath the major surface of the substrate (51) (see Figure 2 and page 10, lines 11-14 of the Specification). Wong teaches the same structural requirement in Figure 2G, wherein Wong clearly shows a doped region (16, 22) formed at a predetermined location beneath the major surface of the substrate (4), as required by Applicant. Therefore, broadly speaking Wong anticipates the claimed limitation.